

Attorney Docket No.: 267/033 (UMD-0055)
Inventors: Rameshwar, Pranela
Serial No.: 10/039,272
Filing Date: October 20, 2001
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This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): An isolated polynucleotide, comprising a nucleotide sequence that has at least 70% identity to SEQ ID NO:1, said identity being calculated over the entire length of SEQ ID NO:1.

Claim 2 (original): The polynucleotide of claim 1, comprising the nucleotide sequence of SEQ ID NO:1.

Claim 3 (currently amended): ~~An~~ A vector comprising a polynucleotide, wherein said polynucleotide encodes an HGFIN polypeptide.

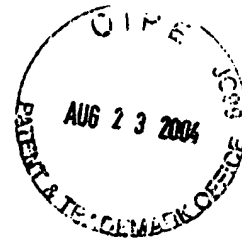
Claim 4 (original): The vector of claim 3, wherein the HGFIN polypeptide further comprises the amino acid sequence of SEQ ID NO:2.

Claim 5 (original): A host cell comprising the vector of claim 3.

Claim 6 (canceled).

Claim 7 (original): A process for producing an HGFIN polypeptide comprising culturing a host of claim 5 under

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conditions sufficient for the production of said polypeptide and recovering the polypeptide from the culture.

Claim 8 (original): A process for producing a cell which produces an HGFIN polypeptide comprising transforming, transducing or transfecting a host cell with the vector of claim 3 such that the host cell, under appropriate culture conditions, produces an HGFIN polypeptide.

Claim 9 (original): The process of claim 8, wherein the cell is a bone marrow derived cell removed from the body of a subject.

Claim 10 (canceled).

Claim 11 (original): An isolated, purified HGFIN polypeptide.

Claim 12 (original): The polypeptide of claim 11, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:2.

Claim 13 (original): An antibody immunospecific for the HGFIN polypeptide of claim 11.

Claim 14 (original): The polypeptide of claim 11, further comprising an amino acid sequence that has at least 70% identity to SEQ ID NO:2, said identity being calculated over the entire length of SEQ ID NO:2.

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Claim 15 (original): A polynucleotide sequence comprising an antisense sequence to a nucleotide sequence encoding a HGFIN polypeptide.

Claim 16 (original): The polynucleotide sequence of claim 15, wherein nucleotide sequence encoding the HGFIN polypeptide is SEQ ID NO:1.

Claim 17 (original): The polynucleotide sequence of claim 16, wherein the nucleotide sequence has at least 70% identity to the antisense polynucleotide sequence of claim 16, said identity being calculated over the entire length of the sequence.

Claim 18 (original): A vector comprising the polynucleotide sequence of claim 16, wherein said vector is capable of inhibiting the expression of an HGFIN polypeptide when said vector is present in a compatible host cell.

Claim 19 (original): A host cell comprising the vector of claim 18.

Claim 20 (canceled).

Claim 21 (original): A pharmaceutical composition comprising a biologically effective amount of a HGFIN polynucleotide and an acceptable carrier.

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Claim 22 (original): The composition of claim 21, wherein the HGFIN polynucleotide sequence is substantially similar to SEQ ID NO:1.

Claim 23 (original): The composition of claim 21, wherein the HGFIN polynucleotide sequence is an antisense sequence to SEQ ID NO:1.

Claim 24 (original): A pharmaceutical composition comprising a biologically effective amount of HGFIN polypeptide and an acceptable carrier.

Claim 25 (original): The composition of claim 24, wherein the HGFIN polypeptide sequence is substantially similar to SEQ ID NO:2.

Claim 26 (original): A pharmaceutical composition comprising a biologically effective amount of an antibody immunospecific for the HGFIN polypeptide comprising the amino acid sequence of SEQ ID NO:2, and an acceptable carrier.

Claim 27 (original): A method of treating a disease associated with abnormal bone marrow cell differentiation or proliferation comprising the administration of a pharmaceutical composition comprising a biologically effective amount of a HGFIN polynucleotide and an acceptable carrier.

Claim 28 (canceled).

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Claim 29 (original): A method of treating a disease associated with abnormal bone marrow cell differentiation or proliferation comprising the administration of a pharmaceutical composition comprising a biologically effective amount of a HGFIN polypeptide and an acceptable carrier.

Claim 30 (canceled).

Claim 31 (original): A method of treating a disease associated with abnormal bone marrow cell differentiation or proliferation comprising the administration of a pharmaceutical composition comprising a biologically effective amount of a polynucleotide coding for the antisense sequence to SEQ ID NO:2, and an acceptable carrier.

Claim 32 (canceled).

Claim 33 (original): A method of treating a disease associated with abnormal bone marrow cell differentiation or proliferation comprising the administration of a pharmaceutical composition comprising a biologically effective amount of an antibody immunospecific for the HGFIN polypeptide comprising the amino acid sequence of SEQ ID NO:2, and an acceptable carrier.

Claim 34 (currently amended): A vector for the delivery of an HFGIN therapeutic to a cell for the treatment of leukemia or lymphoma, wherein the vector comprises an expression cassette encoding the HFGIN therapeutic.

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Claim 35 (original): The vector of claim 34, wherein the HGFIN therapeutic is selected from the group consisting of an HGFIN polynucleotide, an HGFIN polynucleotide antisense sequence, a HGFIN protein, and an antibody immunospecific to the HGFIN protein.

Claim 36 (canceled).

Claim 37 (currently amended): A method for introducing an HGFIN therapeutic into a cell, comprising transducing the cell with the vector of ~~claim 34~~ claim 34.

Claims 38-39 (canceled).

Claim 40 (original): The method of claim 37, wherein the cell is a bone marrow derived cell.

Claim 41 (canceled).

Claim 42 (original): A method for introducing an HGFIN therapeutic into a cell, comprising transfecting the cell with a plasmid comprising an expression cassette encoding the HGFIN therapeutic.

Claim 43 (original): The method of claim 42, wherein the HGFIN therapeutic is selected from the group consisting of an HGFIN polynucleotide, an HGFIN polynucleotide antisense sequence, a HGFIN protein and an antibody immunospecific to the HGFIN protein.

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Claim 44-46 (canceled).

Claim 47 (original): The method of claim 42, wherein the cell is a bone marrow derived cell.

Claim 48-49 (canceled).

Claim 50 (currently amended): A method of treating a lymphoproliferative disease, comprising administering a biologically effective amount of a composition comprising:

(a) a compound of the general formula α -HGFIN-C, wherein α is one or more ~~moieties~~ moieties that specifically binds to a HGFIN protein, HGFIN is one or more HGFIN related genetic sequences and C is one or more toxic ~~moieties~~ moieties; and

(b) A pharmaceutically acceptable carrier.

Claim 51 (canceled).

Claim 52 (original): The method of claim 50, wherein α is selected from the group consisting of an antibody and an antibody fragment.

Claim 53-54 (canceled).

Claim 55 (original): The method of claim 50, wherein C is a radioactive moiety.

Claim 56 (canceled).

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Claim 57 (original): The method of claim 50, wherein C is a chemotoxic moiety.

Claim 58 (canceled).

Claim 59 (original): The method of claim 50, wherein C is a toxic protein moiety.

Claim 60 (canceled).

Claim 61 (original): The method of claim 50, wherein the HGFIN related gene sequence is selected from the group consisting of an HGFIN DNA, cDNA, RNA and HGFIN antisense sequence.

Claim 62 (original): The method of claim 50, wherein the compound to be delivered comprises a compound of the general formula α -HGFIN, wherein α is one or more HGFIN related genetic sequences.

Claim 63 (currently amended): The method of claim 50, wherein the compound to be delivered comprises a compound of the general formula α -C, wherein α is one or more ~~moieties~~ moieties that specifically binds to a HGFIN protein and C is one or more toxic moieties.

Claim 64 (original): A compound for the treatment of a lymphoproliferative disease of the general formula α -HGFIN-C, wherein α is one or more moieties that specifically binds to a

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HGFIN protein, HGFIN is one or more HGFIN related genetic sequences, and C is one or more toxic moieties.

Claim 65 (original): The compound of claim 64, wherein α is selected from the group consisting of an antibody and an antibody fragment.

Claim 66-67 (canceled).

Claim 68 (original): The compound of claim 64, wherein C is a radioactive moiety.

Claim 69 (canceled).

Claim 70 (original): The compound of claim 64, wherein C is a chemotoxic moiety.

Claim 71 (canceled).

Claim 72 (original): The compound of claim 70, wherein C is a toxin protein moiety.

Claim 73 (canceled).

Claim 74 (original): The compound of claim 64, wherein the HGFIN related gene sequence is selected from the group consisting of an HGFIN DNA, cDNA, RNA and HGFIN antisense sequence.

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Claim 75 (original): The compound of claim 64, wherein the compound is comprises of the general formula α -HGFIN, wherein α is one or more moieties that specifically binds to a HGFIN protein and HGFIN is one or more HGFIN related genetic sequences.

Claim 76 (original): The compound of claim 75, wherein the one or more HGFIN related genetic sequences is selected from the group consisting of an HGFIN DNA, cDNA, RNA and HGFIN antisense sequence.

Claim 77 (currently amended): The compound of claim 64, wherein the compound is comprised of the general formula α -C, wherein α is one or more ~~moieties~~ moieties that specifically binds to a HGFIN protein and C is one or more toxic moieties.